

AUG 28 2006

Application No.: 10/669533

Case No.: 61605US003

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (currently amended) A filter element, comprising:
a filtration media;
an upstream filtration media support positioned upstream from and in contact with the filtration media; and
a multi-layer downstream filtration media support positioned downstream from the filtration media, the multi-layer downstream support including a first downstream support layer and a second downstream support layer, wherein:
the first downstream support layer is in contact with the filtration media and is interposed between the filtration media and the second downstream layer, the first downstream support layer is fabricated so as to minimize points of surface contact with the filtration media; and
the second downstream support layer is in contact with the first downstream support layer and is fabricated so as to facilitate lateral fluid flow relative to the multi-layer downstream pleat support, wherein the second downstream support layer comprises an extruded apertured film having ribs, the primary strand or rib formation running in the machine direction.
2. (Original) A filter element as recited in Claim 1, wherein the filtration media is a pleated filtration media having a plurality of longitudinally extending pleats.
3. (Original) A filter element as recited in Claim 2, wherein the longitudinally extending pleats of said pleated filtration media are selected from the group consisting of radial pleats, w-pleats and spiral pleats.
4. (Original) A filter element as recited in Claim 1, wherein the filtration media is a microporous filtration membrane having a pore size of from about 0.1 microns to about 10 microns.
5. (currently amended) A filter element as recited in Claim 1, wherein the filtration media is fabricated from a material selected from the group consisting of

Application No.: 10/669533

Case No.: 61605US003

~~Teflon~~PTFE, nylon, polyaramide, polyvinylidene difluoride, polyether sulfone and combinations thereof.

6. (Original) A filter element as recited in Claim 1, wherein the multi-layer downstream support consists of said first downstream support layer and said second downstream support layer.

7. (Original) A filter element as recited in Claim 1, wherein said first downstream support layer is fabricated from a nonwoven material.

8. (Original) A filter element as recited in Claim 7, wherein said nonwoven material is laminated to said filtration media.

9. (Original) A filter element as recited in Claim 7, wherein said nonwoven material is fabricated as a spunbond, spunlace, airlaid or wetlaid material.

10. (Original) A filter element as recited in Claim 7, wherein said nonwoven material is fabricated from polypropylene, polyester or polyamide.

11. (Original) A filter as recited in Claim 1, wherein said second downstream support layer is an extruded apertured element.

12. (currently amended) A filter element, comprising:

a filtration media;

an upstream pleat support positioned upstream from and in contact with the filtration media; and

a multi-layer downstream pleat support positioned downstream from the filtration media, the multi-layer downstream support including at least a first downstream support layer and a second downstream support layer, wherein:

the first downstream support layer is in contact with the filtration media and is interposed between the filtration media and the second downstream layer, the first downstream support layer is fabricated so as to minimize points of surface contact with the filtration media; and

the second downstream support layer is in contact with the first downstream support layer and is fabricated so as to facilitate lateral fluid flow relative to the multi-layer downstream pleat support, wherein the second downstream support layer comprises an extruded apertured film having ribs, the primary strand or rib formation running in the machine direction.

13. (currently amended) A filter cartridge comprising:

Application No.: 10/669533

Case No.: 61605US003

a filter element having a longitudinal axis, an outer periphery and an inner periphery, and including a filtration media; an upstream filter media support positioned upstream from and in contact with said filtration media; and a multi-layer downstream support positioned downstream from the filtration media, the multi-layer downstream support including a first downstream support layer and a second downstream support layer, wherein:

the first downstream support layer is in contact with the filtration media and is interposed between the filtration media and the second downstream layer, the first downstream support layer being fabricated so as to minimize points of surface contact with the filtration media; and

the second downstream support layer is in contact with the first downstream support layer and is fabricated so as to facilitate lateral fluid flow relative to the multi-layer downstream filter media support, wherein the second downstream support layer comprises an extruded apertured film having ribs, the primary strand or rib formation running in the machine direction;

a perforated cage surrounding the outer periphery of the filter element;
a perforated core surrounded by the inner periphery of the filter element; and
end caps enclosing both ends of the perforated cage.

14. (Original) A filter cartridge as recited in Claim 13, wherein said first downstream support layer is fabricated from a nonwoven material.

15. (Original) A filter cartridge as recited in Claim 14, wherein said nonwoven material is laminated to said filtration media.

16. (Original) A filter element as recited in Claim 14, wherein said nonwoven material is fabricated as a spunbond, spunlace, airlaid or wetlaid material.

17. (Original) A filter element as recited in Claim 14, wherein said nonwoven material is fabricated from polypropylene, polyester or polyamide.

18. (Cancelled).

19. (Cancelled)

20. (Original) A filter cartridge as recited in Claim 13 wherein the perforated cage is equipped with end caps at both ends thereof.

21. (Original) A filter cartridge as recited in Claim 13 wherein said perforated core is a cylindrical core and is coaxially positioned within the filter element which is a cylindrical filter element and the cage is likewise cylindrical and is coaxially positioned about the cylindrical filter element.

22. (currently amended) A filter cartridge comprising:

Application No.: 10/669533

Case No.: 61605US003

a filter element having a longitudinal axis, an outer periphery and an inner periphery, and including a filtration media; and a multi-layer downstream pleat support positioned downstream from the filtration media, the multi-layer downstream support including a first downstream support layer and a second downstream support layer, wherein:

the first downstream support layer is in contact with the filtration media and is interposed between the filtration media and the second downstream layer, the first downstream support layer being fabricated so as to minimize points of surface contact with the filtration media; and

the second downstream support layer is in contact with the first downstream support layer and is fabricated so as to facilitate lateral fluid flow relative to the multi-layer downstream pleat support, wherein the second downstream support layer comprises an extruded apertured film having ribs, the primary strand or rib formation running in the machine direction;

a perforated cage surrounding the outer periphery of the filter element;

a perforated core surrounded by the inner periphery of the filter element; and
end caps enclosing both ends of the perforated cage.